Attorney's Docket No.: 14503-004US1 / F62656PCUS HJW/hor

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

pplicant: Norbert Zander et al.

Art Unit : 1751

Serial No.: 10/567,265

Examiner: Unknown

Filed

: February 6, 2006

Conf. No.: 4436

Title

: CONJUGATES OF A POLYMER AND A PROTEIN LINKED BY AN OXIME GROUP

### MAIL STOP AMENDMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

## INFORMATION DISCLOSURE STATEMENT

Applicants request consideration of the references listed on the attached PTO-1449 form. Under 37 C.F.R. § 1.98 (a)(2)(ii), only copies of foreign patent documents and/or non-patent literature are enclosed. Copies of any listed U.S. patents or U.S. patent application publications can be provided upon request.

This statement is being filed before the receipt of a first Office Action on the merits. Please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Deumber 22

Elizabeth N. Kayter, Ph.D.

Reg. No. 53,103

Fish & Richardson P.C. 60 South Sixth Street, Suite 3300 Minneapolis, MN 55402

Telephone: (612) 335-5070 Facsimile: (612) 288-9696

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I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Attorney's Docket No.: 14503-004US1 / F62656PCUS HJW/hor

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**GROUP** 

# **Mail Stop Amendment**

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

## TRANSMITTAL

The following correspondence relating to this application is enclosed for filing:

- 1. Information Disclosure Statement (1 page);
- 2. Form PTO-1449 (15 pages);
- Copies of Cited References (287 references); and 3.
- 4. A Return Postcard.

Please date stamp and return the enclosed postcard. Please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: Number 22, 2006

Elizabeth N. Kaytor, Ph.D.

Reg. No. 53,103

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	Lisa M. Becker						
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Substitute Form PTO (Modified)

U.S. Department of Commerce Department of Commerce

Attorney's Docket No. 14503-004US1

Application No. 10/567,265

Information Statement
by Applicant
(Use several sheets if necessary)

Applicant
Norbert Zander et al.

Filing Date

Group Art Unit

(37 CFR §1.98(b))

February 6, 2006

1751

U.S. Patent Documents										
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate			
	1	3,191,291	06/29/65	Maier						
	2	4,064,118	12/20/77	Wong						
	3	4,125,492	11/14/78	Cuatrecasas et al.						
	4	4,179,337	12/18/79	Davis et al.						
	5	4,261,973	04/14/81	Lee et al.						
	6	4,412,989	11/01/83	Iwashita et al.						
	7	4,667,016	05/19/87	Lai et al.						
	8	4,703,008	10/27/87	Lin						
	9	4,766,106	08/23/88	Katre et al.						
	10	4,847,325	07/11/89	Shadle et al.						
	11	4,863,964	09/05/89	Hedlund et al.						
	12	4,904,584	02/27/90	Shaw						
	13	5,068,321	11/26/91	Buysch et al.						
	14	5,214,132	05/25/93	Kuga et al.						
	15	5,217,998	06/08/93	Hedlund et al.						
	16	5,218,092	06/08/93	Sasaki et al.						
	17	5,218,108	06/08/93	Sommermeyer et al.						
	18	5,281,698	01/25/94	Nitecki						
	19	5,362,853	11/08/94	Kuga et al.						
	20	5,470,843	11/28/95	Stahl et al.						
	21	5,484,903	01/16/96	Szablikowski et al.						
	22	5,543,332	08/06/96	Lihme et al.						
	23	5,581,476	12/03/96	Osslund						
	24	5,622,718	04/22/97	Al-Shamkhani et al.						
	25	6,083,909	07/04/00	Sommermeyer et al.						
	26	6,555,660	04/29/03	Nissen et al.						
	27	2004/0180858	09/16/04	Sommermeyer						

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Substitute Form PTO-1449 (Modified)

U.S. Department of Commerce Patent and Trademark Office Attorney's Docket No. 14503-004US1

Application No. 10/567,265

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Norbert Zander et al.

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Group Art Unit

(37 CFR §1.98(b))

February 6, 2006

1751

_	Foreig	n Patent Doo	uments or P	ublished Foreign F	atent A	Application	ns	
Examiner	Desig.	Document	Publication	Country or			Trans	lation
<u>Initial</u>	ID	Number	Date	Patent Office	Class	Subclass	Yes	No
	28	2 441 442	09/26/03	CA				
	29	2 478 478	01/09/04	CA		_		
	30	2 478 480	01/09/04	CA				
	31	279 486	06/06/90	DD			Abst.	
	32	100 41 541	03/14/02	DE			Abst.	
	33	101 12 825	02/10/02	DE			Abst.	
	34	101 26 158	12/12/02	DE			Abst.	
	35	101 29 369	03/06/03	DE			Abst.	
	36	101 35 694	02/06/03	DE			Abst.	
	37	101 55 098	05/22/03	DE			Abst.	
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	39	102 17 994	11/06/03	DE			Abst.	
	40	102 54 745	06/03/04	DE			Abst.	
	41	102 56 558	09/16/04	DE			Abst.	
	42	196 28 705	01/15/98	DE .			Abst.	
	43	198 08 079	08/26/99	DE			Abst.	
	44	22 33 977	02/01/73	DE			Abst.	
	45	26 07 706	05/13/93	DE			Abst.	
	46	26 16 086	11/03/77	DE			Abst.	
	47	26 46 854	05/03/89	DE			Abst.	
	48	30 29 307	03/04/82	DE			Abst.	
	49	38 36 600	05/03/90	DE			Abst.	
	50	41 30 807	03/18/93	DE		, , ,	Abst.	
	51	0 019 403	11/26/80	EP				
	52	0 138 572	04/24/85	EP				
	53	0 148 605	07/25/90	EP				
	54	0 205 564	05/02/91	EP				

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	55	0 243 929	11/04/87	EP				
<u> </u>	56	0 304 183	02/22/89	EP				
	57	0 307 827	03/22/89	EP				
	58	0 315 349	05/10/89	EP				
	59	0 338 916	10/25/89	EP			Abst.	
	60	0 402 724	06/02/90	EP			Abst.	
	61	0 411 678	01/08/92	EP				
	62	0 418 523	06/21/95	EP				
	63	0 428 267	05/22/91	EP				
	64	0 605 963	07/13/94	EP				
	65	0 609 968	08/10/94	EP				
	66	0 640 619	03/01/95	EP				
	67	0 646 130	04/05/95	EP			-	
	68	0 668 351	08/23/95	EP				
	69	0 809 996	05/31/96	EP				
	70	1 230 935	08/14/02	EP			Abst.	·
	71	1 398 322	09/11/03	EP				
	72	1 398 327	09/11/03	EP				
	73	1 398 328	09/11/03	EP				
	74	1 400 533	09/11/02	EP				
	75	1 419 080	12/24/75	GB				
	76	WO 02/80979	10/17/02	WIPO			Abst.	
	77	WO 02/09766	02/07/02	WIPO				
	78	WO 02/40057	05/23/02	WIPO				
	79	WO 03/00738	01/03/03	WIPO			Abst.	
	80	WO 03/59246	07/24/03	WIPO				
_	81	WO 03/74087	09/12/03	WIPO			Abst.	

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		Applicant Norbert Zander et al.	
(Use several st	Information Disclosure Statement by Applicant (Use several sheets if necessary)	Filing Date	Group Art Unit
(37 CFR §1.98(b))		February 6, 2006	1751

	Foreig	n Patent Doo	uments or P	ublished Foreign F	Patent A	Application	ns	
Examiner	Desig.	Document	Publication	Country or			Trans	lation
Initial	ID	Number	Date	Patent Office	Class	Subclass	Yes	No
	82	WO 03/74088	09/12/03	WIPO			Abst.	
	83	WO 04/09082	01/29/04	WIPO				
	84	WO 04/24761	03/25/04	WIPO		_		
	85	WO 04/50710	06/17/04	WIPO			Abst.	
	86	WO 04/65425	08/05/04	WIPO			Abst.	
	87	WO 90/07939	07/26/90	WIPO				
	88	WO 90/15628	12/27/90	WIPO				
	89	WO 93/23062	11/25/93	WIPO				
	90	WO 94/01483	01/20/94	WIPO				
	91	WO 94/13697	06/23/94	WIPO				
	92	WO 94/28024	12/08/94	WIPO				
	93	WO 94/29370	12/22/94	WIPO				
	94	WO 95/06058	03/02/95	WIPO				
	95	WO 95/13090	05/18/95	WIPO				
	96	WO 96/11953	04/25/96	WIPO				
-	97	WO 96/19242	06/27/96	WIPO				
	98	WO 96/40662	12/19/96	WIPO				
	99	WO 96/41813	12/27/96	WIPO				
	100	WO 97/21452	06/19/97	WIPO				
	101	WO 97/30148	08/21/97	WIPO				
	102	WO 97/33552	09/18/97	WIPO				
	103	WO 97/38727	10/23/97	WIPO		-	Abst.	
	104	WO 98/01158	01/15/98	WIPO			Abst.	
	105	WO 98/08856	03/05/98	WIPO			Abst.	
	106	WO 98/20905	05/22/98	WIPO		,		
	107	WO 98/32466	07/30/98	WIPO			Abst.	
	108	WO 98/56424	12/17/98	WIPO				

Examiner Signature	Date Considered
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***************************************		Applicant Norbert Zander et al.			
(Modified) Patent and Trademark Office  Information Disclosure Statement by Applicant (Use several sheets if necessary)	Filing Date	Group Art Unit			
(37 CFR §1.98(b))		February 6, 2006	1751		

	Foreign Patent Documents or Published Foreign Patent Applications									
Examiner	Desig.	Document	Publication	Country or		-	Translation			
Initial	ID	Number	Date	Patent Office	Class	Subclass	Yes	No		
	109	WO 99/49897	10/07/99	WIPO						

(	Other Documents (include Author, Title, Date, and Place of Publication)			
Examiner	Desig.			
Initial	ID	Document		
	110	Abuchowski and Davis, "Soluble Polymer-Enzyme Adducts," <u>Enzymes as Drugs</u> , 1981, Holcenberg and Rubberts (eds.), Chapter 13, pp. 367-383, John Wiley & Sons N.Y.		
		Alayash and Cashon, "Hemoglobin and free radicals: implications for the development of a safe		
	111	blood substitute," Molec. Med. Today, 1995, 1(3):122-127		
	112	Ashwell, "Carbohydrate Antigens: Coupling of Carbohydrates to Proteins by a Mixed Anhydride Reaction," Meth. Enzymol., 1972, 28:219-222		
	113	Avigad, "A Simple Spectrophotometric Determination of Formaldehyde and Other Aldehydes: Application to Periodate-Oxidized Glycol Systems," <u>Anal. Biochem.</u> , 1983, 134:499-504		
	114	Baldwin et al., "Synthesis of Polymer-Bound Hemoglobin Samples," <u>Tetrahedron</u> , 1981, 37:1723-1726		
	115	Balland et al., "Intracellular distribution of ampicillin in murine macrophages infected with Salmonella typhimurium and treated with ( <sup>3</sup> H)ampicillin-loaded nanoparticles," <u>J. Antimicrob.</u> Chemother., 1996, 37:105-115		
	116	Barbone et al., "Reticulocyte measurements as a bioassay for erythropoietin," <u>J. Pharm. Biomed.</u> <u>Anal.</u> , 1994, 12(4):515-522		
	117	Bårström et al., "New derivatives of reducing oligosaccharides and their use in enzymatic reactions: efficient synthesis of sialyl Lewis a and sialyl dimeric Lewis x glycoconjugates," <u>Carbohydr. Res.</u> , 2000, 328:525-531		
	118	Bauer et al., "Synthesis of w-(Aminooxy)alkanethiols," <u>J. Org. Chem.</u> , 1965, 30:949-951		
	119	Bauer and Suresh, "S-[w-(Aminoöxy)alkyl]isothiuronium Salts, w,w'-Bis(aminoöxy)alkanes and Related Compounds," J. Org. Chem., 1963, 28:1604-1608		
	120	Bendele et al., "Short Communication: Renal Tubular Vacuolation in Animals Treated with Polyethylene-Glycol-Conjugated Proteins," <u>Toxicol. Sci.</u> , 1998, 42:152-157		
	121	Benesch, "Bis(pyridoxal) Polyphosphates as Specific Intramolecular Cross-Linking Agents for Hemoglobin," Meth. Enzymol., 1994, 231:267-274		
	122	Bepperling et al., "HES 130/0.4, a new HES specification: tissue storage after multiple infusions in rats," Crit. Care, 1999, 3(suppl 1):P153		
	123	Berger et al., "Galactosyltransferase-dependent sialylation of complex and endo-N-acetylglucosaminidase H-treated core N-glycans in vitro," FEBS Lett., 1986, 203(1):64-68		
	124	Black et al., "N-Bromoacetyl-glycopyranosylamines as affinity labels for a $\beta$ -glucosidase and a cellulase," <u>Carbohydr. Res.</u> , 1993, 250:195-202		
	125	Bobbitt, "Periodate Oxidation of Carbohydrates," Carbohydr. Chem., 1956, 11:1-41		
	126	Boissel et al., "Erythropoietin Structure-Function Relationships. Mutant proteins that test a model of tertiary structure," J. Biol. Chem., 1993, 268(21):15983-15993		
	127	Boturyn et al., "Synthesis of Fluorescent Probes for the Detection of Abasic Sites in DNA," <u>Tetrahedron</u> , 1997, 53(15):5485-5492		

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Substitute Form PTO-1449 U.S. Department of Commerce (Modified) Patent and Trademark Office		Attorney's Docket No. 14503-004US1	Application No. 10/567,265
	closure Statement pplicant	Applicant Norbert Zander et al.	
(Use several sheets if necessary)		Filing Date	Group Art Unit
(37 CFR 81 98(h))		February 6, 2006	1751

Other Documents (include Author, Title, Date, and Place of Publication)			
Examiner Initial	Desig. ID	Document	
	128	Bowen et al., "Estimation of Effective and Total Erythropoiesis in Myelodysplasia Using Serum Transferrin Receptor and Erythropoietin Concentrations, with Automated Reticulocyte Parameters," Leukemia, 1994, 8(1):151-155	
	129	Bronzino, The Biomedical Engineering Handbook, CRC Press, USA, Salem, 1995, (TOC only)	
	130	Bunn & Jandl, "The Renal Handling of Hemoglobin. II. Catabolism," J. Exp. Med., 1967, 129:925-934	
	131	Burgess et al., "Stimulation by Human Placental Conditioned Medium of Hemopoietic Colony Formation by Human Marrow Cells," <u>Blood</u> , 1977, 49(4):573-583	
·	132	Bystrický et al., "Determination of the cross-linking effect of adipic acid dihydrazide on glycoconjugate preparation," Glycoconj. J., 1999, 16:691-695	
	133	Cabacungan et al., "Amine Boranes as Alternative Reducing Agents for Reductive Alkylation of Proteins," Anal. Biochem., 1982, 124:272-278	
	134	Carlsson et al., "Protein Thiolation and Reversible Protein-Protein Conjugation," <u>Biochem J.</u> , 1978, 173:723-737	
	135	Cerami, "Beyond Erythropoiesis: Novel Applications for Recombinant Human Erythropoietin," Semin. Hematol., 2001, 38:(3 Suppl 7):33-39	
	136	Cerny et al., "A Hydroxyethyl Starch-Hemoglobin Polymer as a Blood Substitute," Clinical Hemorheology, 1982, 2(4):355-365	
	137	Chamow et al., "Conjugation of Soluble CD4 without Loss of Biological Activity via a Novel Carbohydrate-directed Cross-linking Reagent," J. Biol. Chem., 1992, 267(22):15916-15922	
	138	Chang, "Blood Substitutes Based on Modified Hemoglobin Prepared by Encapsulation or Crosslinking: An Overview," <u>Biomat., Art. Cells &amp; Immob. Biotech.</u> , 1992, 20:159-179	
	139	Chagnon et al., "Murine renal cell carcinoma: evaluation of a dendritic-cell tumour vaccine," <u>BJU</u> <u>Int.</u> , 2001, 88:418-424	
	140	Chaplin, "Monosaccharides," <u>Carbohydrate analysis: a practical approach</u> , 1996, Chaplin and Kennedy (eds.), Chapter 1, "Oligosaccharides," pp. 37-54	
	141	Chaplin, "A Rapid and Sensitive Method for the Analysis of Carbohydrate Components in Glycoproteins Using Gas-Liquid Chromatography," Anal. Biochem., 1982, 123:336-341	
	142	Chapman et al., "Therapeutic antibody fragments with prolonged in vivo half-lives," Nature Biotech., 1999, 17:780-783	
	143	2001, 86:485-493	
		Chu et al., "Further Studies on the Immunogenicity of <i>Haemophilus influenzae</i> Type b and Pneumococcal Type 6A Polysaccharide-Protein Conjugates," <u>Infect. Immun.</u> , 1983, 40:245-256	
	145	Cumber et al., "Preparation of Antibody-Toxin Conjugates," Meth. Enzymol., 1985, 112:207-225	
	146	Delgado et al., "The Uses and Properties of PEG-Linked Proteins," <u>Crit. Rev. Ther. Drug Carrier Syst.</u> , 1992, 9(3,4):249-304	
	147	Delorme et al., "Role of Glycosylation on the Secretion and Biological Activity of Erythropoietin," <u>Biochemistry</u> , 1992, 31(41):9871-9876	
	148	Dittmar et al., "Human Glycoproteins and Derived Variants from Recombinant Mammalian Cell Lines," <u>Advances in Protein Design</u> , 1989, 12:145-156	

Examiner Signature	Date Considered			
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.				
	Substitute Disclosure Form (PTO-1449)			

Substitute Form PTO-1449  (Modified)  U.S. Department of Commerce Patent and Trademark Office		Attorney's Docket No. 14503-004US1	Application No. 10/567,265
	closure Statement	Applicant Norbert Zander et al.	
(Use several sheets if necessary)		Filing Date February 6, 2006	Group Art Unit 1751

Other Documents (include Author, Title, Date, and Place of Publication)			
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minua	149	Dorner et al., "Increased Synthesis of Secreted Proteins Induces Expression of Glucose-regulated Proteins in Butyrate-treated Chinese Hamster Ovary Cells," J. Biol. Chem., 1989, 264(34):20602-20607	
	150	Dowling and Russell, "Pharmacokinetics of a long-acting oxytetracycline-polyethylene glycol formulation in horses," J. Vet. Pharmacol. Therap., 2000, 23:107-110	
	151	Dreborg and Åkerblom, "Immunotherapy with Monomethoxypolyethylene Glycol Modified Allergens," Crit. Rev. Ther. Drug Carrier Syst., 1990, 6(4):315-365	
	152	Edmunds et al., "Transgenically Produced Human Antithrombin: Structural and Functional Comparison to Human Plasma-Derived Antithrombin," <u>Blood</u> , 1998, 91(12):4561-4571	
	153	Blum et al., "Improved silver staining of plant proteins, RNA and DNA in polyacrylamide gels," Electrophoresis, 1987, 8:93-99	
	154	Elliott et al., "Mapping of the Active Site of Recombinant Human Erythropoietin," <u>Blood</u> , 1997, 89(2): 493-502	
	155	European Pharmacopoeia, "Erythropoietin Concentrated Solution," 3rd Edition, 2000, Monography, pp. 655-660	
	156	European Pharmacopoeia, "Erythropoietin Concentrated Solution," 4th Edition, 2002, Monography, pps. 1123-1128	
	157	Fernández-Santana et al., "Conjugation of 5-azido-3-oxapentyl glycosides with thiolated proteins through the use of thiophilic derivatives," Glycoconj. J., 1998, 15:549-553	
Fibi et al., "Evidence for the Location of the Receptor-Binding S Carboxyl-Terminal Domain," <u>Blood</u> , 1991, 77(6):1203-1210		Fibi et al., "Evidence for the Location of the Receptor-Binding Site of Human Erythropoietin at the	
		Fibi et al., "N- and O-Glycosylation Muteins of Recombinant Human Erythropoietin Secreted From	
	160	Fissekis et al., "N-Pantyol-(substituted)amines, Pantothenic Acid Analogues," J. Med. Pharm. Chem., 1960, 2:47-56	
	161	Forno et al., "N- and O-linked carbohydrates and glycosylation site occupancy in recombinant human granulocyte-macrophage colony-stimulating factor secreted by a Chinese hamster ovary cell line," Eur. J. Biochem., 2004, 271:907-919	
	162	Gaertner and Offord, "Site-Specific Attachment of Functionalized Poly(ethylene glycol) to the Amino Terminus of Proteins," <u>Bioconjugate Chemistry</u> , 1996, 7(1):38-44	
Gervais et al., "NMR investigations of the role of the sugar moiety in glycosylated human granulocyte-colony-stimulating factor," Eur. J. Biochem., 1997, 247:386-39  Gillis et al., "T Cell Growth Factor: Parameters of Production and a Quantitative M Activity," J. Immunol., 1978, 120(6):2027-2032  Gonzalez Lio and Thiem, "Chemoenzymatic synthesis of spacer-linked oligosaccha preparation of neoglycoproteins," Carbohydr. Res., 1999, 317:180-190  Gould et al., "The Development of Hemoglobin Solutions as Red Cell Substitutes: 1		Gervais et al., "NMR investigations of the role of the sugar moiety in glycosylated recombinant human granulocyte-colony-stimulating factor," <u>Eur. J. Biochem.</u> , 1997, 247:386-395	
		Gillis et al., "T Cell Growth Factor: Parameters of Production and a Quantitative Microassay for	
		Gonzalez Lio and Thiem, "Chemoenzymatic synthesis of spacer-linked oligosaccharides for the preparation of neoglycoproteins," <u>Carbohydr. Res.</u> , 1999, 317:180-190	
		Gould et al., "The Development of Hemoglobin Solutions as Red Cell Substitutes: Hemoglobin Solutions," Transfus. Sci., 1995, 16:5-17	
	167	Grabenhorst et al., "Construction of stable BHK-21 cells coexpressing human secretory glycoproteins and human Gal(β1-4)GlcNAc-R α2,6-sialyltransferase: α2,6-Linked NeuAc is preferentially attached to the Gal(β1-4)GlcNAc(β1-2)Man(α1-3)-branch of diantennary oligosaccharides from secreted recombinant β-trace protein," Eur. J. Biochem., 1995, 232:718-725	

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Substitute Disclosure Form (PTO-1449)

	Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No.	Application No. 10/567,265
	(Modified)	Tatent and Trademark Office	14503-004US1	10/307,203
Information Disclosure Statement by Applicant			Applicant Norbert Zander et al.	
	(Use several sheets if necessary)		Filing Date	Group Art Unit
	(27 CED 81 08/b))		February 6, 2006	1751

	Other Documents (include Author, Title, Date, and Place of Publication)			
Examiner	Desig.			
Initial	ID	Document		
	168	Grabenhorst and Conradt, "The Cytoplasmic, Transmembrane, and Stem Regions of Glycosyltransferases Specify Their <i>in vivo</i> Functional Sublocalization and Stability in the Golgi," <u>J. Biol. Chem.</u> , 1999, 274(51):36107-36116		
	169	Grabenhorst et al., "Biosynthesis and secretion of human interleukin 2 glycoprotein variants from baculovirus-infected Sf21 cells. Characterization of polypeptides and posttranslational modifications," Eur. J. Biochem., 1993, 215:189-197		
	170	Grabenhorst et al., "In Vivo Specificity of Human $\alpha$ 1,3/4-Fucosyltransferases III-VII in the Biosynthesis of Lewis" and Sialyl Lewis" Motifs on Complex-type N-Glycans. Coexpression studies from BHK-21 cells together with human $\beta$ -trace protein," J. Biol. Chem., 1998, 273(47):30985-30994		
	171	Grabenhorst et al., "Genetic engineering of recombinant glycoproteins and the glycosylation pathway in mammalian host cells," Glycoconj J., 1999, 16(2):81-97		
	172	Gray, "The Direct Coupling of Oligosaccharides to Proteins and Derivatized Gels," <u>Arch. Biochem.</u> Biophys., 1974, 163:426-428 (Fig. 2.1a)		
	173	Greenfield et al., "Evaluation in Vitro of Adriamycin Immunoconjugates Synthesized Using an Acid-sensitive Hydrazone Linker," Cancer Research, 1990, 50:6600-6607		
	174	Grimmecke and Brade, "Studies on the reductive amination of 3-deoxy-D-manno-octulosonic acid (Kdo)," Glycoconj. J., 1998, 15:555-562		
	175	Habeeb, "Determination of Free Amino Groups in Proteins by Trinitrobenzenesulfonic Acid," Anal. Biochem., 1966, 14:328-336		
	176	Hai et al., "Diaspirin Crosslinked Hemoglobin (DCLHb <sup>TM</sup> ) Polymerization," <u>Art. Cells, Blood Subs.</u> , and Immob. Biotech., 1994, 22(3):923-931		
	177	Hallaway et al., "Modulation of Deferoxamine Toxicity and Clearance by Covalent Attachment to Biocompatible Polymers," Proc. Natl. Acad. Sci. USA, 1989, 86:10108-10112		
	178	2003, 14:320-330		
	179	Hartman and Wold "Cross-Linking of Rovine Pancreative Ribonuclease A with Dimethyl		
	180	29:1271-1279		
	181	Hattori et al., "Reduced Immunogenicity of β-Lactoglobulin by Conjugation with Carboxymethyl Dextran," <u>Bioconjug. Chem.</u> , 2000, 11:84-93		
	182	Herman et al., "Characterization, Formulation, and Stability of Neupogen® (Filgrastim), a		
	183	Hermanson, Bioconjugate Techniques, 1996 (TOC only)		
	184	Hermentin et al., "A Strategy for the Mapping of N-Glycans by High-pH Anion-Exchange Chromatography with Pulsed Amperometric Detection," Anal. Biochem., 1992, 203(2):281-289		
	185	Higuchi et al., "Role of Sugar Chains in the Expression of the Biological Activity of Human Erythropoietin," J. Biol. Chem., 1992, 267(11):7703-7709		

Examiner Signature	Date Considered				
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with					
next communication to applicant.	Cubatituta Disalagura Form (DTO 1440)				
	Substitute Disclosure Form (PTO-1449)				

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	Other Documents (include Author, Title, Date, and Place of Publication)			
Examiner	Desig.			
Initial	ID	Document Document		
	186	Sharaf et al., "Studies on Aroyl- and Aryl-Hydrazide Derivatives from D-glycero-D-gulo-Heptono-1,4-Lactone," Carbohydrate Res., 1981, 91:39-48		
	187	Inoue et al., "An Improved Method for the Purification of Human Erythropoietin with High in Vivo Activity from the Urine of Anemic Patients," Biol. Pharm. Bull., 1994, 17(2):180-184		
	188	Iwamoto et al., "Polysaccharide-Coated Oil Droplets in Oil-in-Water Emulsions as Targetable Carriers for Lipophilic Drugs," J. Pharm. Sci., 1991, 80(3):219-224		
	189	Jia et al., "S-nitrosohaemoglobin: a dynamic activity of blood involved in vascular control," Nature, 1996, 380:221-226		
	190	Jones et al., "A convenient synthesis of <i>N</i> -( <i>tert</i> -butyloxycarbonyl)aminooxy ethers," <u>Tetrahedron</u> <u>Letters</u> , 2000, 41(10):1531-1533		
	191	Jones et al., "Multivalent Poly(ethylene glycol)-Containing Conjugates for In Vivo Antibody Suppression," Bioconj. Chem., 2003, 14(6):1067-1076		
	192	Kallin, "Coupling of Oligosaccharides to Proteins Using <i>p</i> -Trifluoroacetamidoaniline," Meth. Enzymol., 1994, 242:119-123		
	193	Keaney, Jr. et al., "NO Forms an Adduct with Serum Albumin that Has Endothelium-derived Relaxing Factor-like Properties," J. Clin. Invest., 1993, 91:1582-1589		
	194	Keipert et al., "Functional properties of a new crosslinked hemoglobin designed for use as a red cell substitute," Transfusion, 1989, 29:768-773		
Kitamura et al., "Establishment and Characterization of a Unique Human Cell Line That Proliferates Dependently on GM-CSF, IL-3, or Erythropoietin," J. Cell. Phys., 1989, 140 Kitamura et al., "Chemical Engineering of the Monoclonal Antibody A7 by Polyethylend		Proliferates Dependently on GM-CSF, IL-3, or Erythropoietin," J. Cell. Phys., 1989, 140:323-334		
		Kitamura et al., "Chemical Engineering of the Monoclonal Antibody A7 by Polyethylene Glycol for Targeting Cancer Chemotherapy," Cancer Res., 1991, 51:4310-4315		
	197	Kleine-Tebbe et al., "Allergen Immunotherapy – A Position Paper of the German Society for Allergology and Clinical Immunology," Pneumologie, 2001, 55:438-444 (w/English summary)		
	198	Klemm et al., "Esterification of Cellulose," <u>Comprehensive Cellulose Chemistry</u> , 1998, Vol. 2, Wiley-VCH, Weinheim, New York, especially chapter 4.4, pps. 99-207		
	199	Kobayashi et al., "Reduced Immunogenicity of β-Lactoglobulin by Conjugation with Carboxymethyl Dextra Differing in Molecular Weight," J. Agric. Food Chem., 2001, 49(2):823-831		
	200	Kojima et al., "Mitomycin C-dextran conjugate: a novel high molecular weight pro-drug of mitomycin C," J. Pharm. Pharmacol., 1980, 32:30-34		
	201	Komatsu et al., "Cloning of granulocyte colony-stimulating factor cDNA from human macrophages and its expression in <i>Escherichia coli</i> ," Jpn. J. Cancer Res., 1987, 78(11):1179-1181		
	202	Krantz, "Erythropoietin," Blood, 1991, 77(3):419-434		
	203	11(1):18-31		
	204	Krystal, "A Simple Microassay for Erythropoietin Based on <sup>3</sup> H-Thymidine Incorporation into Spleen Cells from Phenylhydrazine Treated Mice," <u>Exp. Hematol.</u> , 1983, 11(7):649-660		
	205	Krystal et al., "Purification of Human Erythropoietin to Homogeneity by a Rapid Five-Step Procedure," Blood, 1986, 67(1):71-79		
	206	Kuberan et al., "Preparation and isolation of neoglycoconjugates using biotin-streptavidin complexes," Glycoconj. J., 1999, 16:271-281		

Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if no	t in conformance and not considered. Include copy of this form with
next communication to applicant.	Substitute Disclosure Form (PTO-1449)

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Other Documents (include Author, Title, Date, and Place of Publication)			
Examiner Initial	Desig. ID	Document	
IIIIIai	207	Kurtz and Eckardt, "Assays for Erythropoietin," Nephron., 1989, 51(suppl 1):11-14 (w/English summary)	
	208	Larionova et al., "Conjugation of the Bowman-Birk Soybean Proteinase Inhibitor with Hydroxyethylstarch," Appl. Biochem. Biotech., 1997, 62:175-182	
	209	Lee (ed.), "Synthesis of Peptides and Proteins," Peptide and Protein Drug Delivery, 1991, p. 65	
	210	Lee and Lee, "Neoglycoproteins," Glycoproteins II, 1997, Chapter 17, Elsevier Science B.V., pps. 301-620	
	211	Leenders et al., "β-Glucuronyl Carbamate Based Pro-moieties Designed for Prodrugs in ADEPT," Tetrahedron Letters, 1995, 36(10):1701-1704	
	212	Lees et al., "Activation of soluble polysaccharides with 1-cyano-4-dimethylaminopyridinium tetrafluoroborate for use in protein-polysaccharide conjugate vaccines and immunological reagents," Vaccine, 1996, 14(3):190-198	
	213	Lesnefsky et al., "High-Dose Iron-Chelator Therapy During Reperfusion with Deferoxamine- Hydroxyethyl Starch Conjugate Fails to Reduce Canine Infarct Size," <u>J. Cardiovasc. Pharmacol.</u> , 1990, 16(4):523-528	
	214	Levy et al., "Recombinant Antithrombin: Production and Role in Cardiovascular Disorder," <u>Sem.</u> Thromb. Hem., 2001, 27(4):405-416	
	215	Lin et al., "Cloning and expression of the human erythropoietin gene," Proc. Natl. Acad. Sci. USA, 1985, 82:7580-7584	
	216	Systems, 1etranedron, 1994, 50(30):8941-8968, especially p. 8930	
	217	Lomant and Fairbanks, "Chemical Probes of Extended Biological Structures: Synthesis and	
	218	Lönngren and Goldstein, "Coupling of Aldobionic Acids to Proteins Using Water-Soluble Carbodiimide," Meth. Enzymol., 1994, 242:116-118	
	219	Manger et al., "1-N-Glycyl β-Oligosaccharide Derivatives as Stable Intermediates for the Formation of Glycoconjugate Probes," Biochemistry, 1992, 31:10724-10732	
	220	Neoglycolipid," Biochemistry, 1992, 31:10733-10740	
	221	Maout et al., "Hydroxyethylstarch Conjugated to Human Hemoglobin for use in Blood Transfusion: Comparison with Dextran Conjugates," <u>Carbohydrates and Carbohydrate Polymers - Analysis</u> , Biotechnology, Modification, Antiviral and Other Applications, 1993, Chapter 12, pp. 132-140	
	222	McMahon et al., "Pharmacokinetics and Effects of Recombinant Human Erythropoietin After Intravenous and Subcutaneous Injections in Healthy Volunteers," <u>Blood</u> , 1990, 76(9):1718-1722	
	223	Meinjohanns et al., "Novel sequential solid-phase synthesis of N-linked glycopeptides from natural sources," J. Chem. Soc., Perkin Trans. 1, 1998, 1:549-560	
	224	Mikola and Hänninen, "Introduction of Aliphatic Amino and Hydroxy Groups to Keto Steroids Using O-Substituted Hydroxylamines," <u>Bioconj. Chem.</u> , 1992, 3(2):182-186	
	225	Minnema et al., "Recombinant human antithrombin III improves survival and attenuates inflammatory responses in baboons lethally challenged with <i>Escherichia coli</i> ," <u>Blood</u> , 2000, 95(4): 1117-1123	

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(37 CFR §1.98(b))		February 6, 2006	1751

	Other Documents (include Author, Title, Date, and Place of Publication)			
Examiner Initial	Desig. ID	Document		
	226	Miyake et al., "Purification of Human Erythropoietin," J. Biol. Chem., 1977, 252(15):5558-5564		
	227	Montreuil et al., "Hexuronic acids," <u>Carbohydrate analysis: a practical approach</u> , 1996, Chaplin and Kennedy (eds.), Chapter 5, pp. 175-204		
	228	Mosbech et al., "Hyposensitization in asthmatics with mPEG-modified and unmodified house dust mite extract," Allergy, 1990, 45(2):130-141		
	229	Mosmann, "Rapid Colorimetric Assay for Cellular Growth and Survival: Application to Proliferation and Cytotoxicity Assays," J. Immunol. Meth., 1983, 65:55-63		
	230	Mueller et al., "Recombinant Glycoprotein Product Quality in Proliferation-Controlled BHK-21 Cells," <u>Biotechnol. Bioeng.</u> , 1999, 65(5):529-536		
	231	Davis and Flitsch, "A Novel Method for the Specific Glycosylation of Proteins," <u>Tetrahedron Lett.</u> , 1991, 32(46):6793-6796		
	232	Nagata et al., "The chromosomal gene structure and two mRNAs for human granulocyte colony-stimulating factor," EMBO J., 1986, 5(3):575-581		
	233	Nagata et al., "Molecular cloning and expression of cDNA for human granulocyte colony-stimulating factor," Nature, 1986, 319:415-418		
	234	Nakane et al., "The Accumulation Mechanism of Cationic Mitomycin C-dextran Conjugates in the Liver: In-vivo Cellular Localization and In-vitro Interaction with Hepatocytes," <u>J. Pharm. Pharmacol.</u> , 1988, 40:1-6		
	235	Nedospasov and Khomutov, "Synthesis and some properties of aminooxyalkylcelluloses," Bulletin		
	236	Nimtz et al., "Structural characterization of the oligosaccharide chains of native and crystallized boar seminal plasma spermadhesin PSP-I and PSP-II glycoforms," <u>Eur. J. Biochem.</u> , 1999, 265:703-718		
	237	Nimtz et al., "Structures of sialylated oligosaccharides of human erythropoietin expressed in recombinant BHK-21 cells," <u>Eur. J. Biochem.</u> , 1993, 213:39-56		
	238	Nimtz et al., "Carbohydrate structures of a human tissue plasminogen activator variant expressed in recombinant Chinese hamster ovary cells," <u>FEBS Lett.</u> , 1990, 271:14-18		
	239	Nohynek et al., "Comparison of the potency of glycosylated and nonglycosylated recombinant human granulocyte colony-stimulating factors in neutropenic and nonneutropenic CD rats," Cancer Chemother Pharmacol., 1997, 39:259-266		
	240	Nomura et al., "Pharmacokinetic characteristics and therapeutic effects of mitomycin C-dextran conjugates after intratumoural injection," J. Controlled Release, 1998, 52:239-252		
	241	O'Shannessy and Wilchek, "Immobilization of Glycoconjugates by Their Oligosaccharides: Use of Hydrazido-Derivatized Matrices," Analytical Biochemistry, 1990, 191:1		
	242	17:1474-1483		
	243	Kennedy (eds.), Chapter 3, pp. 55-96		
	244	Pedley et al., "The potential for enhanced tumour localization by poly)ethylene glycol) modification of anti-CEA antibody," Br. J. Cancer, 1994, 70:1126-1130		

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Other Documents (include Author, Title, Date, and Place of Publication)			
Examiner Initial	Desig. ID	Document	
	245	Peeters et al., "Comparison of four bifunctional reagents for coupling peptides to proteins and the effect of the three moieties on the immunogenicity of the conjugates," J. Immunol. Meth., 1989, 120:133-143	
	246	Peron et al., "Hydroxyethyl starch-induced renal insufficiency after plasma exchange in a patient with polymyositis and liver cirrhosis," Clin. Nephrol., 2001, 55(5):408-411	
	247	Pharma Business, July/August 2000, pages 45-60	
	248	Quelle et al., "High-Level Expression and Purification of a Recombinant Human Erythropoietin Produced Using a Baculovirus Vector," <u>Blood</u> , 1989, 74(2):652-657	
	249	Rabiner et al., "Evaluation of a stroma-free hemoglobin solution for use as a plasma expander," <u>J. Exp. Med.</u> , 1967, 126:1127-1142	
	250	Ragupathi et al., "A novel and efficient method for synthetic carbohydrate conjugate vaccine preparation: synthesis of sialyl Tn-KLH conjugate using a 4-(4-N-maleimidomethyl) cyclohexane-1-carboxyl hydrazide (MMCCH) linker arm," Glycoconj. J., 1998, 15:217-221	
	251	Ramos et al., "Enzymatic Synthesis of Neoglycopeptide Building Blocks," Angew. Chem. Int. Ed., 2000, 39(2):396-398	
	252	Reidhaar-Olson et al., "Identification of Residues Critical to the Activity of Human Granulocyte Colony-Stimulating Factor," <u>Biochemistry</u> , 1996, 35:9034-9041	
	253	Relihan et al., "Clearance Rate and Effect on Renal Function of Stroma-Free Hemoglobin Following Renal Ischemia," Ann. Surg., 1972, 176(6):700-704	
	254	Richter and de Belder, "Antibodies against Hydroxyethylstarch Produced in Rabbits by Immunization with a Protein-Hydroxyethylstarch Conjugate," Int. Arch. Allergy Appl. Immun.," 1976, 52:307-314	
	255	Rogers et al., "Effects of polymerization on the oxygen carrying and redox properties of diaspirin cross-linked hemoglobin," Biochim. Biophys. Acta, 1995, 1248:135-142	
	256	Rohrling et al., "Synthesis and testing of a novel fluorescene label for carbonyls in carbohydrates and cellulosics," Synlett, 2001, 5:682-684	
	257	Rose, "Facile Synthesis of Homogeneous Artificial Proteins," J. Am. Chem. Soc., 1994, 116:30-33	
	258	Rudolph et al., "Circulation persistence and biodistribution of lyophilized liposome-encapsulated hemoglobin: An oxygen-carrying resuscitative fluid," Crit. Care Med., 1994, 22:142-150	
	259	Rudolph, "The Freeze-Dried Preservation of Liposome Encapsulated Hemoglobin: A Potential Blood Substitute," Cryobiology, 1988, 25:277-284	
	260	6/(8):1442-1452	
	261	Ruttmann et al., "In vivo investigation into the effects of haemodilution with hydroxyethylstarch (200/0.5) and normal saline on coagulation," Br. J. Anaesthesia, 1998, 80(5):612-616	
	262	Sadamoto et al., "Control of Bacteria Adhesion by Cell-Wall Engineering," J. Am. Chem. Soc., 2004, 126:3755-3761	
	263	Sadrzadeh et al., "The Long-Acting Parenteral Iron Chelator, Hydroxyethyl Starch-Deferoxamine,	

Examiner Signature	Date Considered		
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with			

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Substitute Disclosure Form (PTO-1449)

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•	Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner	Desig.		
Initial	ID	Document	
		Sakai et al., "Synthesis and Physicochemical Characterization of a Series of Hemoglobin-Based	
	264	Oxygen Carriers: Objective Comparison between Cellular and Acellular Types," <u>Bioconj. Chem.</u> ,	
		2000, 11:56-64	
265		Sato et al., "Disposition of a Polymeric Prodrug of Mitomycin C, Mitomycin C-Dextran Conjugate,	
		in the Perfused Rat Liver," J. Pharm. Sci., 1989, 78:11-16	
266		Sawaikar et al., "Products active on mosquitoes. Part VII, Synthesis and biological activity of	
	200	longifolene derivatives," <u>Indian Journal of Chemistry</u> , 1995, 34B:832-835	
	267	Scaglione et al., "A New Model Examining Intracellular and Extracellular Activity of Amoxicillin,	
	207	Azithromycin, and Clarithromycin in Infected Cells," Chemotherapie, 1993, 39:416-423	
	268	Schäfer et al., "Two-year double-blind trial of a monomethoxy polyethylene glycol (mPEG)	
	200	modified grass pollen extract at different dose levels," Ann. Allergy, 1992, 68(4):334-339	
	269	Schlenke et al., "Construction and characterization of stably transfected BHK-21 cells with human-	
	209	type sialylation characteristic," Cytotechnology, 1999, 30:17-25	
	270	Schottelius et al., "Improvement of Pharmacokinetics of Radioiodinated Tyr3-Octreotide by	
	210	Conjugation with Carbohydrates," <u>Bioconjugate Chem.</u> , 2002, 13:1021-1030	
	271	Schröter et al., "Male-specific Modification of Human CD52," J. Biol. Chem., 1999, 274(42):29862-	
	2/1	29873	
		Shafer et al., "Activation of soluble polysaccharides with 1-cyano-4-dimethylaminopyridinium	
	272	tetrafluoroborate (CDAP) for use in protein-polysaccharide conjugate vaccines and immunological	
	212	reagents. II. Selective crosslinking of proteins to CDAP-activated polysaccharides," <u>Vaccine</u> , 2000,	
		18:1273-1281	
.	273	Shah et al., "Characterization of Colony-stimulating Activity Produced by Human Monocytes and	
		Phytohemagglutinin-stimulated Lymphocytes," 1977, <u>Blood</u> , 50(5):811-821	
		Shirafuji et al., "A new bioassay for human granulocyte colony-stimulating factor (hG-CSF) using	
	274	murine myeloblastic NFS-60 cells as targets and estimation of its levels in sera from normal healthy	
		persons and patients with infectious and hematological disorders," Exp. Hematol., 1989, 17:116-119	
	275	Simmons et al., "Potent inhibition of HIV-1 infectivity in macrophages and lymphocytes by a novel	
		CCR5 antagonist," <u>Science</u> , 1997, 276:276-279	
	276	Snyder et al., "HbXL99 $\alpha$ : A hemoglobin derivative that is cross-linked between the $\alpha$ subunits is	
	2.0	useful as a blood substitute," Proc. Natl. Acad. Sci. USA, 1987, 84:7280-7284	
	277	Shu, "Somogyi Micro Copper Method," Method in Carbohydride Chemistry, 1962, 1:383-388	
	270	Song et al., "Toxicity and Antitumor Activity of the Conjugate of Mitomycin C with	
	278	Carboxymethyl-chitin," Arch. Pract. Pharm., 1993, 53(3):141-147	
	270	Souza et al., "Recombinant human granulocyte colony-stimulating factor: effects on normal and	
	279	leukemic myeloid cells," Science, 1986, 232:61-65	
	280	Soyez et al., "Biological evaluation of mitomycin C bound to a biodegradable polymeric carrier," <u>J.</u>	
	200	Controlled Release, 1997, 47:71-80	
	281	Spivak and Hogans, "The In Vivo Metabolism of Recombinant Human Erythropoietin in the Rat,"	
	201	<u>Blood</u> , 1989, 73:90-99	
		Staros, "N-Hydroxysulfosuccinimide Active Esters: Bis(N-hydroxysulfosuccinimide) Esters of Two	
	282	Dicarboxylic Acids Are Hydrophilic, Membrane-Impermeant, Protein Cross-Linkers,"	
		<u>Biochemistry</u> , 1982, 21:3950-3955	

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Examiner Signature	Date Considered
Examiner Signature	Bate Considered
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	Other Do	ocuments (include Author, Title, Date, and Place of Publication)
Examiner	Desig.	
Initial	ID	Document
	283	Sunamoto and Iwamoto, "Protein-Coated and Polysaccharide-Coated Liposomes as Drug Carriers,"
	263	CRC Critical Review in Therapeutic Drug Carrier Systems, 1986, 2:117-136
	284	Sytkowski et al., "Human erythropoietin dimers with markedly enhanced in vivo activity," Proc.
	207	Natl. Acad. Sci. USA, 1998, 95(3):1184-1188
ŀ	285	Sytkowski et al., "An Erythropoietin Fusion Protein Comprised of Identical Repeating Domains
		Exhibits Enhanced Biological Properties," J. Biol. Chem., 1999, 274(35):24773-24778
1	200	Takeuchi et al., "Relationship between sugar chain structure and biological activity of recombinant human erythropoietin produced in Chinese hamster ovary cells," <u>Proc. Natl. Acad. Sci. USA</u> , 1989,
	286	86:7819-7822
		Takeuchi and Kobata, "Structures and functional roles of the sugar chains of human
	287	erythropoietins," Glycobiology, 1991, 1(4):337-346
	<del></del>	Tam et al., "Soluble Dextran-Hemoglobin Complex as a Potential Blood Substitute," Proc. Natl.
	288	Acad. Sci. USA, 1976, 73(6):2128-2131
		Tanaka et al., "Pharmacokinetics of recombinant human granulocyte colony-stimulating factor
İ	289	conjugated to polyethylene glycol in rats," Cancer Research, 1991, 51:3710-3714
	200	Thomas et al., "Measuring blood volume with fluorescent-labeled hydroxyethyl starch," Crit. Care
	290	Med., 2000, 28(3):627-631
	291	Thomas, "Carbohydrate Binding Sites," Meth. Enzymol., 1977, 46:362-368
	202	Thorpe et al., "Blockade of the galactose-binding sites of ricin by its linkage to antibody," Eur. J.
292		Biochem., 1984, 140:63-71
		Toyama et al., "Surface design of SPR-based immunosensor for the effective binding of antigen or
	293	antibody in the evanescent field using mixed polymer matrix," Sensors and Actuators B, 1998,
		52:65-71
	294	De Velasco et al., "Synthetic Peptides Representing T-Cell Epitopes Act as Carriers in
		Pneumococcal Polysaccharide Conjugate Vaccines," Infect. Immun., 1995, 63(3):961-968
	295	Van Patten et al., "Oxidation of Methionine Residues in Antithrombin," J. Biol. Chem., 1999,
	<u> </u>	274(15):10268-10276  Veronese et al., "Surface Modification of Proteins. Activation of Monomethoxy-Polyethylene
	296	1
	290	Appl. Biochem. Biotech., 1985, 11:141-152
		Vilaseca et al., "Protein conjugates of defined structure: Synthesis and use of a new carrier
	297	molecule," Bioconjugate Chemistry, 1993, 4(6):515-520
	<del> </del>	Webb II and Kaneko, "Synthesis of 1-(Aminooxy)-4-[(3-nitro-2-pyridyl)dithio]butane and 1-
	298	
		Reagents," Bioconjugate Chem., 1990, 1:96-99
	299	Weidler et al., "Pharmakokinetische Merkmale als Kriterien für den klinischen Einsatz von
	299	Hydroxyethylstärke," ArzneimForsch./Drug Res., 1991, 41:494-498 (w/English summary)
300		White and Kennedy, "Oligosaccharides," Carbohydrate analysis: a practical approach, 1996, Chaplin
	1 300	and Kennedy (eds.), Chapter 2, pp. 1-36
	301	Whitesides et al., "Rates of Thiol-Disulfide Interchange Reactions between Mono- and Dithiols and
	ļ	Ellman's Reagent," J. Org. Chem., 1977, 42(2):332-338
	302	Wong et al., "Analysis of carbohydrate-protein interactions with synthetic N-linked
	<u> </u>	neoglycoconjugate probes," Biochem. J., 1993, 296:817-825

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Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 14503-004US1	Application No. 10/567,265
	closure Statement	Applicant Norbert Zander et al.	
(Use several sheets if necessary)		Filing Date February 6, 2006	Group Art Unit 1751

	Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document	
	303	Wong et al., "Synthetic glycosylation of proteins using N-(β-saccharide) iodoacetamides: applications in site-specific glycosylation and solid-phase enzymic oligosaccharide synthesis," Biochem. J., 1994, 300:843-850	
	304	Wong, Chemistry of protein conjugation and cross-linking, 1993, CRCS, Inc. (TOC only)	
	305	Xue and Wong; "Preparation of Conjugated Hemoglobins," Meth. Enzymol., 1994, 231:308-322	
	306	Yalpani et al., "Selective Chemical Modifications of Dextran," J. Polymer Science: Polymer Chemistry Edition, 1985, 23:1395-1405	
	307	Yamaguchi et al., "Effects of site-directed removal of N-glycosylation sites in human erythropoietin on its production and biological properties," J. Biol. Chem., 1991, 266(30):20434-20439	
	308	Yoshida, "Glycamine Formation via Reductive Amination of Oligosaccharides with Benzylamine," Meth. Enzymol., 1994, 247:55-64	
	309	Zalipsky, "Functionalized Poly(ethylene glycol) for Preparation of Biologically Relevant Conjugates," <u>Bioconjugate Chem.</u> , 1995, 6:150-165	
	310	Zara et al., "A Carbohydrate-Directed Heterobifunctional Cross-Linking Reagent for the Synthesis of Immunoconjugates," Anal. Biochem., 1991, 194:156-162	
	311	Zettlmeissl et al., "Characterization of Recombinant Human Antithrombin III Synthesized in Chinese Hamster Ovary Cells," J. Biol. Chem., 1989, 264 (35):21153-21159	
	312	Zhou et al., "Application of capillary electrophoresis, liquid chromatography, electrospray-mass spectrometry and matrix-assisted laserdesorption/ionization - time of flight - mass spectrometry to the characterization of recombinant human erythropoietin," <u>Electrophoresis</u> , 1998, 19(13):2348-2355	
	313	Zou et al., "Allylmalonamide as a bivalent linker: Synthesis of biantennary Gm <sub>3</sub> -saccharide-Keyhole limpet hemocyanin glycoconjugate and the immune response in mice," <u>Glycoconj. J.</u> , 1999, 16:507-515	
	314	Zucali and Sulkowski, "Purification of human urinary erythropoietin on controlled-pore glass and silicic acid," <a href="Exp. Hematol.">Exp. Hematol.</a> , 1985, 13(3):833-837	

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